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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,497	09/08/2006	Neils Richard Hansen	H27362	2271
128 7590 08/13/2009 HONEYWELL INTERNATIONAL INC. PATENT SERVICES 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245				
EXAMINER				
TRAN, BINH X				
ART UNIT		PAPER NUMBER		
1792				
MAIL DATE		DELIVERY MODE		
08/13/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,497

Applicant(s)

HANSEN ET AL.

Examiner

Binh X. Tran

Art Unit

1792

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4-13-2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4, 7-13 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4, 7-13, 16-21 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 16 is objected to because of the following informalities: In claim 16, applicants label plurality of step as follow: a), b), c), d), c), e). It appears that there are two different steps label as step "c)" (in line 5 and line 9). Further, applicants labels step "c)" in line 9 right after step "d)" in line 8. This appears to be a typo. The examiner suggests applicants re-label step c) in line 9 and step e) in line 10. Appropriate correction is required

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-2, 4, 7-13, 16-21 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the slurry of catalyst further comprises organic materials. In the last line of claim 1, the applicants recite "treating the dried slurry to remove organic materials". However, the applicants fail to disclose the slurry of catalyst comprises organic materials. If the slurry catalyst does not comprise organic materials, then the step of "treating the dried slurry to remove

organic materials" would be null because there are no organic materials to remove in the first place.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the step of forming gas diffusion electrodes from the dried slurry. In claim 1, applicants recite "a process for manufacturing gas diffusion electrodes" in the preamble of the claim. However applicants fail to disclose forming gas diffusion electrodes in the body of the claim.

Claim 1 recites the limitation "the dried slurry" in line 9. There is insufficient antecedent basis for this limitation in the claim.

In claim 4, "treating the restricted area to render the well less hydrophobic" is vague and indefinite. It is unclear from the claim whether the phrase "less hydrophobic" is compared to what specific area.

Claims 2, 4, 7-13 are indefinite because they directly or indirectly depend on indefinite claim 1.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the slurry of catalyst further comprises organic materials. In the last line of claim 16, the applicants recite "curing the dried slurry to remove organic materials". However, the applicants fail to disclose the slurry of catalyst comprises organic materials. If the slurry catalyst does not comprise organic materials, then the step of "curing the dried slurry to remove

organic materials" would be null because there are no organic materials to remove in the first place.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the step of forming gas diffusion electrodes from the dried slurry. In claim 16, applicants recite "a process for manufacturing gas diffusion electrodes" in the preamble of the claim. However applicants fail to disclose forming gas diffusion electrodes in the body of the claim.

In line 2 of claim 18, the phrase "lightly pressing" is subjective, vague and indefinite. It is unclear from the claims what specific range of force or pressure that applicants consider as "lightly pressing".

Claims 17-19 are indefinite because they directly or indirectly depend on indefinite claim 16.

Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the electrodes are formed of the dried slurry. It is well known in the art that gas diffusion electrodes are solid material. Applicants recites that the electrode are prepared from the slurry (i.e. liquid material). However, applicants fail to disclose that the slurry is dried to form a solid material. The gas diffusion electrodes are not a liquid material.

In line 5 of claim 21, "preparing the electrode from the slurry and the PTFE substrate in the confined area" is vague and indefinite. It is unclear from the claim what specific step or steps that applicants consider as "preparing".

Claim 21 recites the limitation "the well" in line 6. There is insufficient antecedent basis for this limitation in the claim.

In line 6 of claim 21, the phrase "lightly pressing" is subjective, vague and indefinite.

Response to Arguments/Amendment

4. Applicant's amendment along with the arguments filed on 5-29-2009 with respect to claims 1-2, 4, 7-13 have been considered but are moot in view of the new ground(s) of rejection.

A new ground of rejection and objection are set forth to discuss applicant's new claims 16-21.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh X. Tran whose telephone number is (571)272-1469. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Primary Examiner
Art Unit 1792

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